1/1:33

Application No.: 09/638,268 Docket No.: 20421-00074-US

## AMENDMENTS TO THE CLAIMS

1. (original) A method comprising:

providing a design-under-test (DUT) configuration file comprising a specification of bus transaction types and parameters corresponding to said DUT; and processing said configuration file to generate a test case comprising bus transactions for verification of said DUT.

- (original) The method of claim 1, wherein said processing step further
  comprises evaluating rules in said configuration file to include or exclude selected ones of said
  bus transactions from said test case.
- 3. (original) The method of claim 1, wherein said processing step comprises converting said specification into a plurality of combinations of said parameters.
- 4. (currently amended) The method of claim 1[[4]] said DUT for verification comprising applying said bus transactions to said DUT for verification.
  - (original) A method comprising:
    describing a DUT in a configuration file using a condensed syntax;
    generating a test case for verification of said DUT by converting said condensed syntax

into an enumeration of possible parameter combinations for bus transactions of said DUT.

Application No.: 09/638,268 Docket No.: 20421-00074-US

6. (original) The method of claim 5, further comprising including rules in said configuration file to include or exclude parameter combinations from said enumeration.

- 7. (original) The method of claim 5, wherein said syntax specifies a range of parameter values for said bus transactions.
- 8. (original) The method of claim 5, wherein said syntax specifies transaction types, a set of parameters for each transaction type, and directives for determining a mode of said converting.
- 9. (original) The method of claim 8, wherein said directives cause a value for said parameters to be stepwise incremented.
- 10. (original) The method of claim 8, wherein said directives cause values for said parameters to be evaluated as a list.
- 11. (original) The method of claim 8, wherein said directives cause said transaction types to be selected at random.
- 12. (original) A computer-usable medium storing computer-executable instructions, said instructions when executed implementing a process comprising:

evaluating a syntax of a DUT configuration file including statements defining transaction types and parameters corresponding to said DUT; and

generating bus functional language statements from said syntax.

Application No.: 09/638,268

Docket No.: 20421-00074-US

- 13. (currently amended) The computer-usable medium of claim 12[[11]] wherein said configuration file further includes rules for including or excluding selected bus functional language statements from being generated.
- (original) The computer-usable medium of claim 12 wherein said evaluating 14. and generating steps comprise:

testing a parameter combination generated from said configuration file against said rules; and

outputting said parameter combination in a bus functional language statement when said parameter combination is not excluded by said rules.

> 15. (original) A system comprising:

a memory including computer-executable instructions;

a processor coupled to said memory for executing said instructions; and

a configuration file for a DUT including bus transaction types and parameters corresponding to said DUT;

wherein said instructions process said configuration file to generate bus transactions for verification of said DUT.

16. (original) The system of claim 15, wherein said configuration file includes rules for including or excluding selected bus transactions from being generated.

Application No.: 09/638,268 Docket No.: 20421-00074-US

17. (New) A method for generating a test case for a buss interface comprising: preparing specifications of parameter combinations corresponding to buss transactions of a device under test;

forming a configuration file of said parameter combinations in a condensed syntax including commands and rules to select various parameter combinations to be included in or excluded from the test case; and

generating from said configuration file all bus transactions defined by said rules comprising said test case; and

storing said bus transactions in an output file for use in a bus simulator.

- 18. (New) A method for generating a test case for a buss interface according to claim 17 wherein said configuration file includes statements defining transaction types to be generated and command statements which specify the parameters associated with each transaction type.
- 19. (New) The method for generating a test case according to claim 18 wherein said command identifies a subset of said parameters which limits the number of transactions in said test case.
- 20. (New) The method for generating a test case according to claim 19 wherein said command statement identifies a significance level with each parameter combination.

74 14:77

Application No.: 09/638,268

Docket No.: 20421-00074-US

21. (New) The method according to claim 20 wherein said generator generates a transaction from each parameter of said command statement beginning with the lowest level of significance.